

## *A Hard Bargain* Bartering Ranchero-style

### **Materials**

[Barter & Trade journal page](#)  
(Figure W)

[Merchant Goods journal page](#)  
(Figure W-1)

[Candle Making Math journal page](#)  
(Figure X)

[Candle Making Instructions](#)  
(Figure Y) and materials  
(optional)

[Journals](#)

### **Oh, California**

[Chapter 4, Lesson 1](#)

### **Pre-Planning**

[Plan to break up the class into groups of two students.](#)

[Prepare copies of the Barter & Trade, Merchant Goods and \(if you choose to make candles\) the Candle Making Math journal pages for each student journal.](#)

[Gather materials and prepare copies of Candle Making Instructions \(optional\).](#)

Through the 1840s, trading ships from New England and other parts of the world sailed along the California coast and traded with the rancheros. Hides and tallow were bartered in exchange for a variety of goods including shoes, clothes, fabric, jewelry and spices. Hundreds of pounds of hides and tallow were then shipped back to New England (United States) to be made into leather products, candles and soap.

This activity gives students an opportunity to use math to barter and trade for specific goods. As an optional art project, candle making instructions are included. Students then figure out what profit they would make as a candle-making merchant.

### **Anticipation**

◆ Ask the students:

*What if I had something you wanted and you had something I wanted. What could we do?* (Trade)

*Would we need to use money?* (No, bartering and trading involves no money, only goods or services)

◆ Explain to the students that the rancheros bartered for goods. After Mexico won its independence from Spain, California became a Mexican colony. Rancheros were then allowed to trade goods with foreign countries. Bartering involved going back and forth to decide how much of one item was worth in trade for another item. *Example: 1 hide (worth \$2.00) might be bartered for 4 shirts (worth 50 cents each).*

◆ Ask the students:

*What did the rancheros barter with?* (Hides and tallow.)

*What did they barter for?* (Clothes, fabric, spices, jewelry, etc.)

## **Procedure**

### **Part I**

1. Split the students up into groups of two.
2. Explain to the groups that one person will be a ranchero and the other will be a sea merchant. Their task will be to barter for goods using the *Barter & Trade* journal worksheets. Each student can have a chance to play both roles using their individual worksheets.

## *Pre - Visit Activities* A Hard Bargain

3. Before groups begin, choose a student to demonstrate the activity with you.
4. Pass out the Barter & Trade worksheets.
5. Have the students work in their groups, bartering their goods and filling out the worksheet.
6. Have teams share some of the items traded and how much the items were worth.
7. Ask the students:
  - a. *Why were cattle important to the rancheros?*  
(They provided the hides and tallow the rancheros needed to barter for other goods.)
  - b. *By raising cattle for hides and tallow, what impact did that have on the land?*  
(The cattle compacted the earth and ate native plants including the new oaks growing from seed (acorn) therefore when the old trees died there were no new trees to take the place of the old. This changed the landscape.)

### Part II

1. Explain that some of the tallow from the rancheros was taken by the ship's captain to South America. The merchants in South America traded for tallow to make candles and soap. Later, the candles and soap were traded back to the ship's captain who would trade them with the rancheros. They would barter to trade hides and tallow for candles and soap.
2. Make candles (optional).
3. Pass out the Candle Making Math journal pages.
4. Have students answer the following questions:
  - a. *If you received 10 pounds of tallow worth 5 cents a pound, how much is all the tallow worth?*
  - b. *If with the tallow you made 20 candles that are worth 10 cents each, how much are all your candles worth?*
  - c. *Taking how much your candles are worth and subtracting how much you spent for the tallow, how much profit did you earn?*
5. Have the students work out the answers on their worksheets. Give assistance as needed.
6. After students are finished, discuss the results.

# Barter & Trade

## Figure W

### Your Roles

- Ranchero:**
- ◆ Your hides are worth \$2 per hide.
  - ◆ Your tallow is worth 5¢ a pound.
  - ◆ You have 4 hides and 5 pounds of tallow for trade.
- Merchant:**
- ◆ You have items for trade (see separate list).

### Your Task

1. **Merchant:** decide how many hides and how much tallow you want to buy. Fill in your order on the trade agreement below.
2. **Ranchero:** based on how many hides and tallow the merchant wants, look at the merchant's list of goods and decide which items you want that equal the value of your hides and tallow. Fill out the trade agreement below:

Items for the Merchant	Number wanted	Value Per Item	Total Value
Hides		\$2.00	
Tallow		\$0.05	
Total Amount			

Items for the Ranchero	Number wanted	Value Per Item	Total Value
Total Amount			
Left Over			

## Merchant Goods

Figure W-1

### Clothing

Shirt	\$ .50
Pants	\$ .50
Vest	\$ .25
Jacket	\$1.00
Scarf	\$ .10
Hat	\$ .75
Skirt	\$ .50
Blouse	\$ .50
Dress	\$1.75
Shawl	\$1.00
Boots	\$1.00
Shoes	\$ .75
Fan	\$ .20

### Spices & Candy

(per ounce)

Cinnamon	\$ .10
Cloves	\$ .05
Licorice	\$ .05
Chocolate	\$ .10
Peppermint	\$ .05

### Fabric

Cotton	\$ .10
Silk	\$ .25
Velvet	\$ .25

### Hair Items

Comb	\$ .05
Brush	\$ .10
Mirror	\$ .10

### Toys

Ball	\$ .20
Doll	\$ .60
Music box	\$ .60

### Jewelry

Silver Pin	\$ .60
Gold Ring	\$ .75
Necklace	\$ .75
Earrings	\$ .25

## *Candle Making Math*

*Figure X*

1. If you received 10 pounds of tallow worth 5 cents a pound, how much is the tallow worth?

2. Using the tallow, you made 20 candles that are worth 10¢ each, how much are all your candles worth?

3. Taking how much your candles are worth and subtracting how much you spent for the tallow, how much profit did you earn?

## *Candle Making Instructions*

### *Figure Y*

*Paraffin or used candles*

*Wicking or string  
(10" lengths, 1 per student)*

*10" sticks or dowels*

*Hot plate or stove*

*Large pot*

*Coffee can*

*Pot holders*

*Water*

1. Fill a pot half way with water
2. Place the pot of water onto a stove or hot plate to heat.
3. Put a coffee can into the pot of water.
4. Put pieces of wax into the coffee can.



5. Heat the wax until it melts. Melt enough wax so that it almost fills the coffee can.
6. Tie string or wicking onto a long stick or dowel so that it hangs freely.
7. Holding your hands at both ends of the stick, lower the string into the melted wax and pull back up. *(Note: This is an East-Coast method. The Spanish/Mexicans poured the wax onto the wick.)*
8. Allow the wax to dry briefly before dipping it back into the wax.
9. Continue to dip the candles into the melted wax until they are the desired thickness.